



EM84/6FG6

obsolete
10/64
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ELECTRON-RAY TUBE

9-PIN MINIATURE INDICATOR TYPE WITH TRIODE UNIT

GENERAL DATA

Electrical:

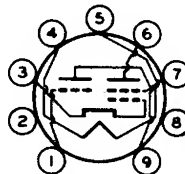
Heater, for Unipotential Cathode:

Voltage (AC or DC). 6.3 volts
Current 0.27 amp

Mechanical:

Operating Position. Any
Maximum Overall Length. 2-27/32"
Maximum Seated Length 2-13/32"
Length, Base Seat to Bulb Top (Excluding tip). 2-7/32" $\pm$ 3/32"
Diameter. 0.750" to 0.875"
Bulb. T6-1/2
Base. Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW. 9GA

Pin 1—Triode Grid
Pin 2—Internal Connection—
Do Not Use
Pin 3—Cathode
Pin 4—Heater
Pin 5—Heater



Pin 6—Fluorescent Target*
Pin 7—Ray-Control Electrode
Pin 8—Internal Connection—
Do Not Use
Pin 9—Triode Plate

* Fluorescent target is on inner surface of glass envelope above pin 7.

INDICATOR SERVICE

Maximum and Minimum Ratings, Design-Center Values:

RAY-CONTROL-ELECTRODE VOLTAGE:

Without current flowing through
series triode-plate resistor. 550 max. volts
With current flowing through
series triode-plate resistor. 300 max. volts

FLUORESCENT-TARGET VOLTAGE:

Without current flowing through
series triode-plate resistor. 550 max. volts
With current flowing through
series triode-plate resistor. { 300 max. volts
150 min. volts

CATHODE CURRENT 3 max. ma

TRIODE-PLATE DISSIPATION. 0.5 max. watt

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode . . 100 max. volts
Heater positive with respect to cathode . . 100 max. volts

BULB TEMPERATURE (At hottest point
on bulb surface). 120 max. °C

Typical Operation:

With ray-control electrode connected to triode plate

Triode-Plate Supply Voltage. 250 volts
Fluorescent-Target Voltage 250 volts

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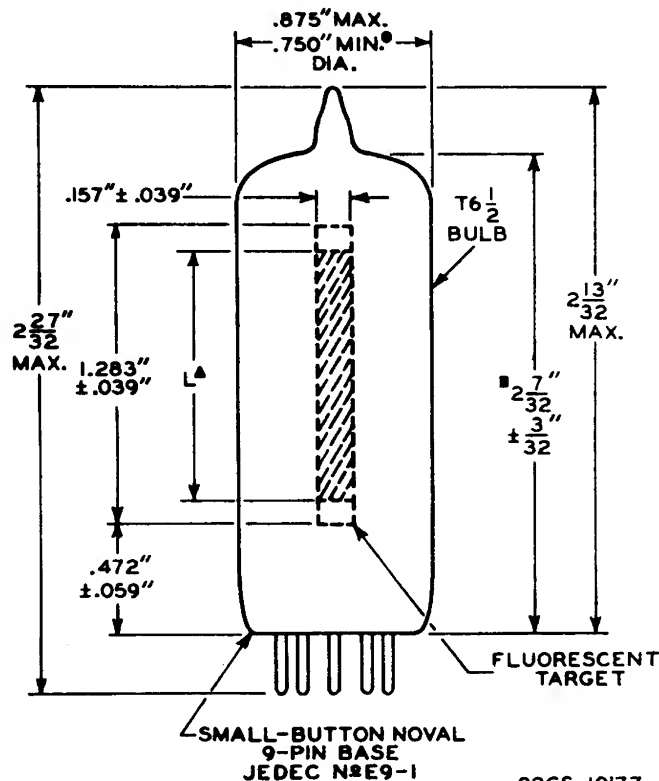
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Series Triode-Plate Resistor . . .	0.47	0.47	megohm
Triode-Grid-Supply Voltage . . .	0	-22	volts
Triode-Grid Resistor	3	3	megohms
Triode-Plate Current	0.45	0.06	ma
Fluorescent-Target Current . . .	1.1	1.6	ma
Length of Dark Part of Fluorescent Target (Dimension "L" on Dimensional Outline)	0.83 ± 0.20	0	inch
Length of Dark Part of Fluorescent Target when triode-grid resistor = 0	0.94 ± 0.20	-	inch

Maximum Circuit Values:

Triode-Grid-Circuit Resistance	3 max.	megohms
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- APPLIES IN ZONE STARTING 0.375" FROM BASE SEAT.
- MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY RING GAUGE OF 7/16" INSIDE DIAMETER.
- ▲ "L" = LENGTH OF DARK PART OF FLUORESCENT TARGET.



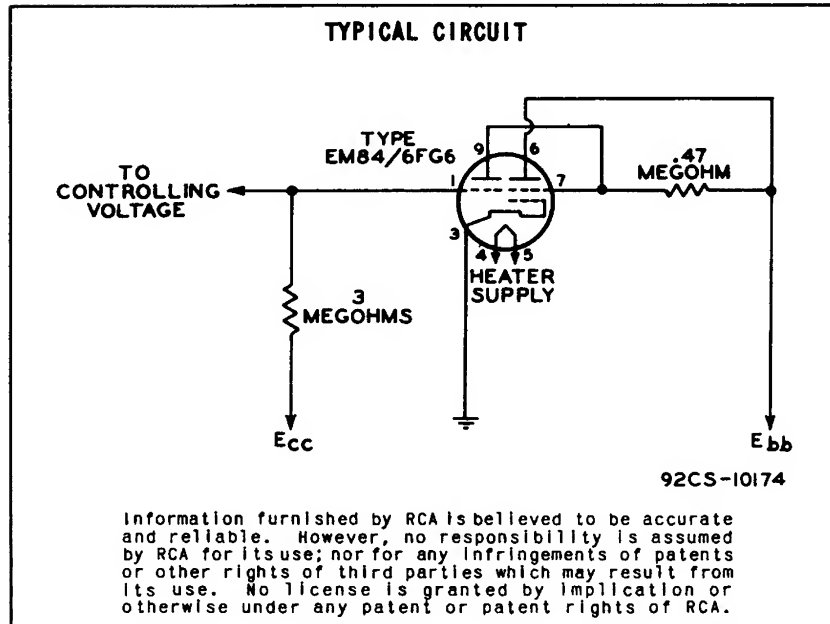
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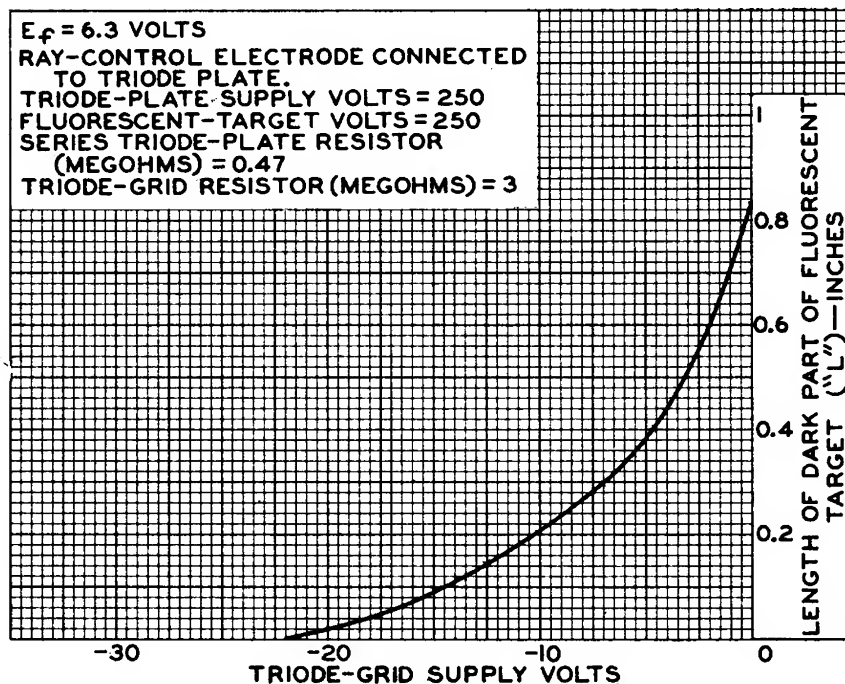
TYPICAL CIRCUIT



8-59

CE-10174

TYPICAL OPERATION CHARACTERISTIC



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CS-10179